Restricted Circulation

This paper is not an official document; it is for information only and reference cannot be made to it in any printed publication without the permission of the author.

AGRICULTURAL MEMORANDUM No 407(a)

Chances of return to capacity using September data

L P Smith

Ag Mem No 407 expressed doubts regarding the valid extrapolation of end of September deficit data. This contingency table has now been recalculated using the pattern of distribution of rainfall about the long term October average and assuming an October evapotranspiration loss of 0.8 in. The results were (chances of return before October 31 out of 100)

End of September Deficit (inches)	Average Annual Rainfall and approximate October average					
	20 2.0	22 2.15	24 2.35	26 2.55	28 2.90	30 3.30
0.5	70	74	78	81	84	87
1.0	50	58	64	68	73	79
1.5	32	40	47	53	61	68
2.0	19	27	33	39	47	57
2.5	10	17	22	28	36	46
3.0	8	11	15	19	26	35
3.5	4	6	9	13	18	27
4.0	1	3	5	9	13	20
4.5	1	1	3	5	9	15

If the rains in October during the next decade return to an earlier pattern (1916-1950) and tend to increase over their recent values this table is probably more reliable than that in Ag Mem 407.

Any comments or suggestions on this paper should be referred to the author.

Meteorological Office
Bracknell
Berkshire

October 1971

13819/SS/10/71/60